

Overview of session information: NBN E-learning Project

Design Industry Partnerships through the
National Broadband Network

Holmesglen Institute of TAFE

Overview of session information

	Session 1: 26 March 2012	Session 2: 23 April 2012	Session 3: 7 May 2012
Connections	Venue 1: Holmesglen (students) Optus – NBN equivalent infrastructure (100 mbps)	Venue 1: Holmesglen (students) Optus – NBN equivalent infrastructure (100 mbps)	Venue 1: Holmesglen (students) Optus – NBN equivalent infrastructure (100 mbps)
	Venue 2: AARNet offices AARNet – NBN equivalent infrastructure	Venue 2: NBN site Brunswick NBN	Venue 2: NBN site Brunswick NBN
Software program	Venue 1: Polycom HDX 8000 Codec	Venue 1: Skype (free version)	Venue 1: Polycom HDX 8000 Codec
	Venue 2: LifeSize Express 220 Codec	Venue 2: Skype (free version)	Venue 2: LifeSize ClearSea client
Equipment	<p>Venue 1</p> <p>Polycom HDX 8000 hardware system, including:</p> <ul style="list-style-type: none"> • Codec (video conferencing unit) • High definition camera • Microphone • Remote control • Cables (power, audio, camera, LAN, DVI connector) <p>Internet</p> <p>HDMI television</p> <p>Projector, projector screen and cables – to display shared content</p>	<p>Venue 1</p> <p>Apple Mac OS desktop computer, including:</p> <ul style="list-style-type: none"> • Built-in camera • Built-in audio <p>Projector, project screen and cables – to display the industry practitioners</p>	<p>Venue 1</p> <p>Polycom HDX 8000 hardware system, including:</p> <ul style="list-style-type: none"> • Codec (video conferencing unit) • High definition camera • Microphone • Remote control • Cables (power, audio, camera, LAN, DVI connector) <p>Internet</p> <p>HDMI television</p> <p>Projector, projector screen and cables – to display content</p>

This project was made possible by the National VET E-learning Strategy through
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Equipment continued	<p>Venue 2</p> <p>LifeSize Express 220 hardware system, including:</p> <ul style="list-style-type: none"> • Codec (video conferencing unit) • High definition camera • Microphone (Phone) • Remote control • Cables (power, audio, camera, LAN, DVI connector) <p>Apple Macbook Pro (laptop) – for content sharing</p> <p>Two HDMI televisions – students on one screen and themselves or content on the other</p> <p>VGA connector – Macbook to HDMI television</p>	<p>Venue 2</p> <p>Apple Macbook Pro (laptop) including:</p> <ul style="list-style-type: none"> • Built-in webcam • Built-in audio device 	<p>Venue 2</p> <p>Apple Macbook Pro (laptop)</p> <p>External webcam – Microsoft LifeCam Studio</p> <p>External audio device – Jabra Speak 410</p> <p>32" Mac display monitor – used so the industry practitioners could easily view both the students and the work they were presenting</p>
Set up	<p>Venue 1</p> <ul style="list-style-type: none"> • Connect the HDX to the monitor/s • Connect camera cable from HDX to the camera (Camera Input 1) • Connect audio cables • Connect Walta connection to back of HDX as well as the microphone • If using an ISDN connection, connect your PRI (or condensed BRI) to the appropriate port on the top row • Connect the LAN cable to your local IP network (the top connection of two Ethernet ports) • If connecting a computer for content sharing, connect appropriate cable (DVI connection) to PC Input port on bottom row. The audio input for the computer is above the video input (stereo jack) • Connect the power cable and power on all equipment 	<p>Venue 1</p> <p>Mac desktop computer already set up in the classroom. Projector cable connected to the computer for a mirrored output</p>	<p>Venue 1</p> <ul style="list-style-type: none"> • Connect the HDX to the monitor/s • Connect camera cable from HDX to the camera (Camera Input 1) • Connect audio cables • Connect Walta connection to back of HDX as well as the microphone • If using an ISDN connection, connect your PRI (or condensed BRI) to the appropriate port on the top row • Connect the LAN cable to your local IP network (the top connection of two Ethernet ports) • If connecting a computer for content sharing, connect appropriate cable (DVI connection) to PC Input port on bottom row. The audio input for the computer is above the video input (stereo jack) • Connect the power cable and power on all equipment

Setup continued	<p>Venue 2</p> <p>Hardware system and televisions permanently set up at the AARNet office</p> <p>Own Macbook connected to the hardware system using a VGA connector</p>	<p>Venue 2</p> <ul style="list-style-type: none"> • Connect one network cable from NBN NTD to the router • Connect the other network cable from router to laptop • Connect the webcam to laptop • Connect the audio device to laptop • Turn on and login to laptop/desktop • Login to Skype • Dial recipient's Skype address • Adjust webcam and or audio, if required 	<p>Venue 2</p> <ul style="list-style-type: none"> • Connect one network cable from NBN NTD to the router • Connect the other network cable from router to laptop • Connect the webcam to laptop • Connect the audio device to laptop • Connect the display monitor to the laptop • Turn on and login to laptop/desktop • Open and login to ClearSea client • Dial the IP address • Dial the conferencing ID when prompted • Adjust webcam and or audio, if required
IT support	<p>Venue 1</p> <ul style="list-style-type: none"> • Technology support officer • Mac technician 	<p>Venue 1</p> <ul style="list-style-type: none"> • Technology support officer • Mac technician 	<p>Venue 1</p> <ul style="list-style-type: none"> • Technology support officer • Mac technician
	<p>Venue 2</p> <ul style="list-style-type: none"> • Project officer • Multimedia support officer 	<p>Venue 2</p> <ul style="list-style-type: none"> • Project officer • Multimedia support officer 	<p>Venue 2</p> <ul style="list-style-type: none"> • Project officer • Multimedia support officer

Issues	Venue 1 No issues. AARNet's BDM was present for the session and is familiar with the hardware system and video conferencing technology	Venue 1 Skype was a last minute plan Students had to lean over a computer to its built-in webcam and built-in audio device to talk to the industry practitioners – not ideal Recording mechanisms not in place	Venue 1 Bandwidth congestion
	Venue 2 Content sharing dropped out at one stage. This was resolved by ending the video call and re-joining the conference	Venue 2 Skype was a last minute plan Recording mechanisms not in place	Venue 2 Content sharing worked in the test session but did not work during the class session. Thought to be due to traffic congestion at Holmesglen's end

Abbreviations	
NBN	National Broadband Network
Mbps	Megabits per second
AARNet	Australia's Academic and Research Network
Codec	Short for coder/decoder. A computer program capable of compressing and decompressing data to make them playable on your computer
LAN	Local area network
DVI	Digital visual interface
HDMI	High definition multimedia interface
VGA	Video graphics array
ISDN	Integrated services digital network
PRI	Primary rate interface
BRI	Basic rate interface
IP	Internet protocol
PC	Personal computer
NTD	Network termination device
ID	Identification